/270 cont./

621 and the children under 15 years of age certainly not exceeding
162 ten, only two or three of them being younger. The physical type
142 seems well preserved; the number of handsome and healthy indi-
viduals—especially among the men—were in the large majority
● [141] (Pl. VII, A-B, A /see p. 45 /: Tõnkŏd'daᵕ, around 25 years old;
1.723 meters tall; horizontal cephalic index: 84.65). The dis-
164 eases which rage in the region—yellow fever and smallpox—are
those which eliminate rather than impair. Many natives bear
[732] traces of the last, however. A leper was living in the village.
Along with a blind man, he represented the only infirmities.
191 Only one native, an escapee from the missions, spoke fluent
Portuguese, which it seems he had formerly been able to read and
write. Five or six understood it but had a vocabulary of only a
few words at their disposal. The others did not know the language
at all.

Structure of the Village

616 Kejara aldeia is divided into two exogamous phratries, named
614 respectively Tugare and Čera. The meaning of these terms was
[621] never specifically stated to us; only once, in connection with clan
Ki, which means tapir, it was mentioned to us that all the Čera
are tapirs. Each of these phratries is divided into several clans (1)

1. The term võbe, which we translate this way, means precisely "group of relatives."

or groups of clans, a list of which follows:

Tugare phratry:
Paiwe (Hedgehog) clan
Ārõre (Catepillar) clan
Ewåguddu (Buriti) clan
Apibore clan.

/139 cont./

121 One cannot say, generalizing, that the sex that does the heavier and economically more valuable work has a position superior or inferior to the other one. Also, many times, it is not possible to decide which is the heavier
462 or economically more valuable work. Thus, Karl von den
222 Steinen (o.c., p. 490) says of the Bororo that among them, "in spite of all the hunting, the vegetable food sought by the women has greater importance because it is obtained with more regularity and in abundance. The women look for roots by means of a sharpened stick, climb with great agility the palm trees among which the oaussú and the acurí have preference, collect the nuts, cut out in the top the 'palm cabbage,' look for fruits of the jatobá /locust tree/ and of the piquí, /Caryocar brasiliense/, etc."

462 The men's typical tasks are, among the Indians,
[229] hunting, cutting and carving wood, and the building of the house. Yet there are exceptions with regard to these tasks too: in some tribes the woman accompanies the man in hunting, even, in certain cases, shooting with the bow; in other tribes, for example among the Bororo, she cuts certain trees in order to obtain palm nuts and honey; in
462 many she also helps in the construction of the house. But,
141 considering this general division of labor, we might, perhaps, be led to suppose, at first sight, that the woman would want to get rid of the heavier tasks, since, among /140/ most of the Indians, she is on the average smaller (3)

[171]

3. In contrast let there be indicated the following tribes described by Barbosa Rodrigues (v. E. Roquette-Pinto, Rondonia, 3rd. ed., São Paulo, 1935, p. 196): "Tembés -- Male stature, in general, shorter than the female. Women tall and thin; men short and fat. Mundurucús -- They are muscular. Men shorter than the

/140 cont./

462
141

women, relatively. Women relatively wider in biacromial. Aráras -- The dimensions of the male type are smaller in relation to those of the women. Women narrow in hip and wide biacromial. *

and has less muscular strength than the man, besides being
462 hindered by menstruation and by maternity. Upon investi-
482 gating more rigorously, however, one discovers that, with the exception of a few tribes of agriculturalists, such as, for example, the Tapirapé, the woman has tasks no less heavy than the man, for example, that of carrying loads
[434] on the marches. Among the Bororo the woman is even capable of carrying heavier loads than the man, and, because of this, in the tasks of harvesting at the missions she often earns more than he does.

462 It is also a mistake to think that among the Indians
22 the woman exclusively is dedicated to harvesting the wild plant food and to agriculture. Both sexes collect all the comestibles that they find, although among the hunting peoples the women busy themselves preferably with the harvesting of vegetables, which represent the most important food and which can be obtained more regularly, while the men endeavor to supply the meat.
[241] The agriculture, however, among many tribes -- (and in
[171] the greater part of the tribes that I visited) -- is almost exclusively a task of the /141/ man, and the woman participates, in some of these tribes, for example among the Tapirapé, only in the tillage itself with the digging stick, that is, in the task of putting into the soil the seed grains, maize, cotton, or earthnuts, but not that of turning the earth and of planting tubers, such as manioc and cará /yam/, or of planting bananas, etc.

/468 cont./

000 existence after death. Heavenly fleas; meteor conjuration.

●141 Anthropological.

Body height.

20 men: max. 191.2, min. 167.0, av. 173.6.
6 women: max. 168.2, min. 156.2, av. 160.5.

A striking difference from the height of the Schingú /Xingu/ Indians! The Bororó women correspond approximately to the Bakaïrí /Bacairi/ men. The average of the 26 Bororó measured, of both sexes, comes to 170.6, which figure, however, is of no value considering the disproportion of 20 men and six women. According to the Topinard schema, the Bororó are tall people, since his lower limit is 170.0. In the table of average figures for men given by Topinard,* the Bororó would occupy third place

[113]

* Anthropologie. Translation by R. Neuhauss from the 3rd French edition. Second edition, p. 320. Leipzig, 1888.

among the ten tribes of tall stature; they would be exceeded by the Tehuelche of Patagonia (178.1) and the Polynesians (176.2) and correspond almost exactly to the Irokesen /Iroquois/ (173.5).

Breadth of outspread arms. Body height = 100.

20 men: max. 113.2, min. 99.9, av. 104.7.
6 women: max. 102.4, min. 97.4, av. 100.3.

The minimum among the men -- 0.2 -- occurred in the case of the tallest Bororó measured, whose armspread was 191.0 with a body height of 191.2. In the case of two of the six women the breadth of the outspread arms was less than the body height: -- 0.2 with 156.2 in body height and -- 4.2 with 160.7 in body height.

Shoulder breadth. A. Body height = 100.

19 men: max. 25.0, min. 21.6, av. 23.9.
6 women: max. 22.6, min. 20.4, av. 21.8.

/468 cont./

B. Absolute

19 men: max. 45.3, min. 38.5, av. 41.6.

6 women: max. 38.0, min. 32.5, av. 34.6.

The maximum under B belongs to the tall son of Moguyokuri (Pl. 26), who had the tallest body height with 191.2 and the figure 23.7 for A. The next highest figure for absolute shoulder-breadth is 43.5 with a relative one of 23.6. If we compare the Kulisehu Indians, p. 140, the absolute average for the Bororó is 41.6, more than the largest average of 41.4 there for the Mehinakú /Mehinacu/, and the relative average for the Bororó of 23.9 less than the smallest average of 24.1 there for the Nahuquá.

/469/

Chest circumference. A. Body height = 100.

19 men: max. 58.4, min. 52.4, av. 55.1.

6 women: max. 55.5, min. 47.9, av. 51.3.

B. Absolute

19 men: max. 100.8, min. 90.0, av. 95.4.

6 women: max. 93.3, min. 76.6, av. 82.5.

If we compare this measurement, too, as we did the preceding one, with the Kulisehu Indians, pages 140, 142, we again find the highest absolute average for the Bororó of 95.4 larger than the highest average for the Mehinakú with 95.1 and the lowest relative average for the Bororó of 55.1 the same as the lowest average there of 55.1 for the Nahuquá.

Head height. Body height = 100.

18 men: max. 19.4, min. 12.8, av. 14.6.

6 women: max. 16.1, min. 13.0, av. 14.5.

Two men have very high figures. If we calculate the average without the maximum of 19.4 (37.0 centimeters) and the next largest figure of 16.8 (31 centimeters), the 16 men have a smaller average by 0.4, namely, only 14.2, which is smaller than the average for the six women.

/469 cont./

141 Head circumference. Body height = 100.

20 men: max. 34.4, min. 31.1, av. 32.9.
6 women: max. 36.6, min. 31.6, av. 33.4.

The minimum of the men measured on the Schingú -- in the case of a Trumaí -- came to 32.4; cf. page 142. The average for the Bororó, 32.9, is lower than the lowest average of the series observed there, namely, 33.7 for the Kamayurá /Camayura/, and, to be sure, the difference of 0.8 is exactly the same as the difference between the lowest and the highest average of the Kulisehu tribes (Kamayurá 33.7, Auetö 34.5).

Length-breadth index of the head.

20 men: max. 85.6, min. 75.0, av. 80.8.
6 women: max. 79.8, min. 76.2, av. 77.7.

10 men below the average: 75.0, 76.4, 77.0, 77.6, 77.8, 79.4, 79.6, 80.2, 80.3, 80.3, and 10 men above the average: 80.9, 81.5, 81.8, 82.3, 82.5, 8[illegible].0, 84.4, 84.8, 85.5, 85.6.

3 women below the average: 7[illegible].2, 76.6, 77.6, and 3 women above the average: 77.9, 78.3, 79.8.

I have presented all the individual figures in order to show that the average figures in this case give a correct picture. Among the men, the difference between maximum and minimum is so great that one might have doubted it. The maximum for the women is lower than the average for the men and the difference between the sexes has an essentially different aspect than on the Kulisehu; cf. page 143. In the averages, the figures for the Bororó men are close to the highest on the Kulisehu and are exceeded only by the index of the Trumaí, 81.1.

Relation of head length to ear height. Maximum length of head = 100.

20 men: max. 75.4, min. 61.3, av. 67.9.
6 women: max. 69.4, min. 62.2, av. 66.2.

Jaw angle. Edge of hair -- chin = 100.

19 men: max. 65.9, min. 51.7, av. 58.3.
6 women: max. 67.3, min. 52.4, av. 58.4.

/469 cont./

141 Zygomatic arch. Edge of hair -- chin = 100.

19 men: max. 85.2, min. 72.8, av. 78.7.
6 women: max. 84.6, min. 70.3, av. 78.5.

Cheekbone protuberance. Edge of hair--chin = 100.

19 men: max. 57.6, min. 45.7, av. 49.0.
6 women: max. 49.1, min. 42.7, av. 46.6.

/470/

Middle face. Nasal root--chin = 100.

20 men: max. 69.4, min. 53.8, av. 60.9.
6 women: max. 68.0, min. 58.0, av. 62.3.

Nasal height. Nasal length = 100.

18 men: max. 112.5, min. 92.0, av. 100.1.
6 women: max. 111.6, min. 102.3, av. 106.8.

Nasal breadth. Nasal height = 100.

18 men: max. 108.9, min. 77.8, av. 89.1.
6 women: max. 95.1, min. 73.3, av. 85.3.

Shoulder height. Body height = 100.

20 men: max. 89.9, min. 79.4. av. 84.2.
6 women: max. 85.3, min. 82.3, av. 83.9.

Navel height. Body height = 100.

20 men: max. 63.0, min. 57.4, av. 59.5.
6 women: max. 63.0, min. 58.9, av. 60.4.

Symphysis height. Body height = 100.

19 men: max. 53.0, min. 47.1, av. 50.9.
6 women: max. 53.3, min. 47.4, av. 49.8.

Iliac-crest height. Body height = 100.

20 men: max. 62.3, min. 55.8, av. 59.9.
4 women: max. 61.7, min. 58.1, av. 60.1.

Arm length. Body height = 100.

18 men: max. 52.5, min. 43.6, av. 46.5.
6 women: max. 46.2, min. 42.9, av. 44.5.

/470 cont./

141 Hand length. A. Absolute.

19 men: max. 19.2, min. 16.1, av. 17.8.
6 women: max. 17.4, min. 16.0, av. 16.6.

B. Body height = 100.

19 men: max. 11.1, min. 9.5, av. 10.4.
6 women: max. 11.3, min. 9.8, av. 10.4.

C. Arm length = 100.

20 men: max. 24.2, min. 19.3, av. 22.1.
6 women: max. 24.3, min. 21.7, av. 23.2.

Length-breadth index of hand. Hand length = 100.

18 men: max. 50.3, min. 41.6, av. 45.1.
5 women: max. 46.9, min. 41.2, av. 44.3.

Trochanter height. Body height = 100.

20 men: max. 53.6, min. 48.4, av. 51.1.
6 women: max. 55.6, min. 49.4, av. 52.1.

Foot length. A. Absolute.

20 men: max. 28.3, min. 24.0, av. 26.6.
6 women: max. 25.5, min. 23.1, av. 24.0.

B. Body height = 100.

20 men: max. 16.4, min. 14.1, av. 15.3.
6 women: max. 15.2, min. 14.6, av. 14.9.

Length-breadth index of foot. Foot length = 100.

20 men: max. 43.3, min. 30.8, av. 37.5.
6 women: max. 38.9, min. 36.1, av. 37.5.

Foot height. Trochanter height = 100.

17 men: max. 9.1, min. 7.1, av. 7.6.
5 women: max. 7.9, min. 6.8, av. 7.4.

142 The skin has a pronounced loam color, but all shades occurred, from light, yellowish (cheek) to dark, almost purplish (chest). In general the best match was Radde 33 m; forehead somewhat more reddish, even (the cheek likewise) ascertained at 33 n and 33 o.

/470 cont./

164 Some individuals showed a skin affection, which was most prominent in the case of Moguyokuri's wife. Here only the face, the hypogastrium from the navel downwards where the skin was covered, and the back of the foot were free; /471/ otherwise the epidermis was covered with scaly ridges in concentric coils, circles, ellipses, roughly comparable to the markings of polished agate.

142 Hair black and as often stiff and straight as wavy, less often -- in two of the 20 men -- curly. Beard hair, where not plucked, sparse on the chin and upper lip.

Head generally high, usually wide, often round. Ridge at the back of the head strongly developed. Forehead low, among the men more often sloping, among the women more often straight, only exceptionally high and arched, often covered with hair. Pronounced ridges, especially among the men, are a conspicuous characteristic. Face generally high and wide, seldom high and narrow, usually oval, seldom round, in exceptional cases square. Cheek bones prominent.

Iris dark coffee-brown, in exceptional cases light brown. Eyes far apart. Eyelid opening often slanting, but in the majority of cases horizontal, generally low, almond-shaped, in exceptional cases slit. Ear lobes small or very small, more than once joined on. Nose: root more often wide than narrow, more often depressed than projecting, bridge generally wide, usually straight or slightly arched, more than once even saddle-shaped, alae wide, occasionally roof-shaped, and among the men powerful, among the women delicate, tip moderately blunt, openings turned forward, round. Lips full, curved, protruding. Teeth, even, large, opaque, generally yellowish, but not infrequently white, often greatly and as much as half chewed down. Prognathism moderate; chin seldom receding.

Breasts of the women who have given birth, pendulous with large areola. Genitals of the men small. The praeputium was artificially lengthened by manipulations with the cuff.

141 Hands and feet relatively small; short index finger. Circumference of the thigh, measured on a man with a body height of 173.0, 50 centimeters; of the calves, 35 centimeters. Longest

/471 cont./.

141 toe: in the case of 17 men, II nine times, I seven times, I = II once; in the case of five women, II three times, I two times.

302 Dress. Eyelashes, eyebrows, beard hair, and body hair were plucked or shaved. The people are now beginning to leave the eyelashes of some children intact, which was a great advantage to them, according to our taste.

The head hair was treated in a very different manner, but equally arbitrarily by men and women alike. The tonsure which one would expect from the name "Coroados" is restricted to an occasional one of one centimeter in diameter. Perhaps the name comes from the large feather crowns. Widowers and widows wore their hair cut short. The most common and original style for both sexes was that the hair was combed to the forehead and cut off here straight across, but hung down freely in back; cf. Plate 26 /see p. 575/. Next to the ears occasionally another step was cut or a bunch tied together like a paint brush, sometimes the men's hair was twisted into a knot in back or /472/ a bast band was wound around the head. Women who proved amenable to Brazilian customs parted their hair in the center. One man or another also went about with loose, uncut hair parted in the
412 center. Nowadays the hair was generally cut with scissors, between two shells by the old method. The comb consisted of pointed little rods which were tapered at both ends and joined together in the middle section by crude plaiting; the plaiting lay between two cross-strips tied together at the projecting ends.

291 The men, almost without exception, wear a hip cord. One or another, however, went about without it. The cuff, inobá (no, oaussu palm; ba, eggs, scrotum), called gravata by the Brazilians, has already been discussed and illustrated on page 184 (with the festive flag). One can very easily make a model from a strip of paper three centimeters wide and 14 centimeters long, by putting the two ends together to form a ring and then twisting one end about 90° and folding it slightly under the other. If a new or somewhat tighter cuff was put on, the praeputium was tied with a string in front of the glans and drawn through; by this manipulation and the wearing of the cuff, it was considerably

4: Oberg E-5 (1949)1953 Bororo SP8
SP17 Nambicuara
Br Brazilian Indians SL4
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It is curious that the Umotina series is metrically so different from Ehrenreich's São Lourenço Bororo. The former are considerably shorter-statured,[3] longer- and higher-headed, and absolutely and relatively narrower-faced. In these respects, the Umotina are much closer to the Carajá. Yet Oberg noted that the Umotina were lighter in skin color than the tribes north of the Planalto do Matogrosense, while Ehrenreich (1897, p. 79) considered the Carajá the darkest Indians he saw. Because of this and the following description by Oberg, I am hesitant to link the Umotina with people like the Carajá.

• Bo Br
• 141 142

Oberg describes some of the Umotina as having flat Mongoloid faces combined with long heads. These long heads have prominent bun-shaped occiputs; narrow, sloping, pyramidal-shaped foreheads with no frontal bosses; and heavy brow-ridges. The position of glabella relative to nasion was higher than in the other groups he investigated. The upper integumental lip was long. Pronouncedly shovel-shaped incisors were not found. The Mongoloid fold of the eye was absent in some, pronounced in others (pls. 9, *a*, *d*; 10, *b*, *c*). Eye color was dark brown, but lacked the brightness noted in the Nambicuara and Caduveo (p. 85). Wavy hair was common, according to Oberg, but does not appear evident in the photographs (pls. 9, 10). Gray hair was observed only among the old women. Men past middle age showed a tendency for baldness, with recession of the hairline, and thinning of the frontal and temporal hair. Like the neighboring Guató, the old Umotina men had thin but not straggly beards. For this reason the Umotina have been long referred to as "Barbados" by neo-Brazilians.

These descriptions and the metric data suggest considerable physical variability within the Bororo group. Determination of the actual extent of this variability must await further studies.

SUMMARY

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While the Upper Xingú tribes under consideration and the Paressí may have had differing racial origins, the physical data collected over the past 50 years suggest that they now form a racial unit. Possibly the Iranxe could be added to this

[3] That the São Lourenço Bororo are not a selectedly tall series is suggested by Colbacchini's (1942, p. 142) higher mean stature of 178.0 cm. for an Eastern Bororo group.

[p. 134 (A)]